Trials and Tribulations of Vascular Surgery. Evidence-based Vascular Surgery.
R. M. Greenhalgh and F. G. R. Fowkes, eds.
London: W.B. Saunders, 1996. 434 pages; price £ 68.

This book contains 38 essays read at the 18th Charing Cross Symposium 1996. The contributors were asked to examine the evidence of effectiveness for management of common vascular problems, to review trials, to assess quality of evidence for treatment, and to identify future research activities. The main themes are carotid problems, aneurysms, occlusive arterial disease of the lower limbs, and varicose veins. Despite this range of subjects, the editors have succeeded in their aim of presenting, in a single volume, the current level of evidence-based vascular surgery as well as valuable surveys of major on-going trials without undue repetition.

Vascular surgery is a young, dynamic branch of medical science. But it is also an art and practical solutions, based on scientific evidence, to clinical problems are not always available. Two well-argued examples concern the intriguing question of whether vein graft surveillance for failure has an influence on amputation rates and whether distal revascularisation for limb salvage is worth-while. The overview presented in the section on carotid surgery emphasises the need for reporting standards and uniform epidemiological methods. Consider, for example, the disagreement on how to measure the degree of arterial narrowing! The aneurysm section includes chapters on the status of the small abdominal aortic aneurysm trial and on the problems of deciding the best treatment of popliteal aneurysms. A power calculation on the latter issue would suggest that more than 1000 patients are needed to reach any conclusion at all which stresses the methodological and practical problems. In the venous section, an overview of the new classification and guidelines for the grading and investigation of chronic venous disease is useful for a uniform reporting system.

For vascular surgery, as for all medicine, it is obviously necessary to apply standards for scientific trials and subsequent reporting. But where are we, when huge resources are used in individual departments, for example on endovascular treatment of arterial lesions, without, apparently, systematic scientific protocols, but with unclear indications and a multitude of varying procedures? Two papers, both American, with this unacceptable approach stand out against the chapter of quality dealing with the available evidence for use of percutaneous transluminal angioplasty for lower limb atherosclerosis. Yet, the conclusion is that clinical decisions on the best treatment for an individual will continue to rely on suspect evidence until reports of randomised, controlled trials become available.

The book is a valuable addition to the library because it documents and identifies areas where additional research is urgently needed. Vascular surgeons in training would be well advised to study the volume in detail to be armed for discussions with their trainers and examiners and for ideas to future research projects. The printing is clear, and the reproductions of angiograms and line drawings are fine. The references appended to each chapter present a useful collection of lists of key articles within the areas discussed. This specialised reference source was published in time for the annual symposium. My only regret is that the volume could not include the lively, stimulating, and often sharp discussions that took place after the presentations.

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